The chief difference between the skulls of *P. melanogaster* and *P. anhinga*, apart from the form of the occipital style, is in the form of the palatine bones; in *P. anhinga* these bones are rounded off posteriorly, the lateral margins curving inwards gradually. In *P. melanogaster*, on the other hand, the thin lateral wings of the palatines form a right angle behind; they are cut perfectly square.

There are no other very salient points of difference in the skulls of these two species; in *Plotus melanogaster* the ridges which bound the temporal fossæ above are more pronounced than in *P. anhinga*; but possibly this is rather a difference of age than of species. However, in Garrod's figure of the skull of *P. anhinga*, which represents that of an adult bird, and has been drawn, no doubt, from one of the two skulls now in my custody, the same difference is apparent; the stronger development of the occipital style in *P. melanogaster* perhaps needs a stronger development of these ridges, for the two together form the line of origin of the temporal muscle.

The postorbital processes are better developed in *P. anhinga* than in *P. melanogaster*; this cannot be a question of age, for the skull of *P. melanogaster* is that of a younger bird than that of *P. anhinga*.

With regard to other parts of the skeleton, the only differences that I could detect concerned the ribs and the vertebral column.

The skeleton of *Plotus anhinga* has a very rudimentary rib, consisting of a small bit of bone, not more than half an inch in length, attached to about the middle of the last complete rib. This is absent from the skeleton of *P. melanogaster*, and has certainly not been lost, for that skeleton was prepared with the greatest care.

The ossification of "Donitz's" Bridge has been mentioned by

Mr. Forbes.

6. Descriptions of Seven new Species of Land-Shells from the U.S. of Colombia. By. G. B. Sowerby, F.L.S., F.Z.S.

Received March 1, 1892.7

# (Plate XXIII.)

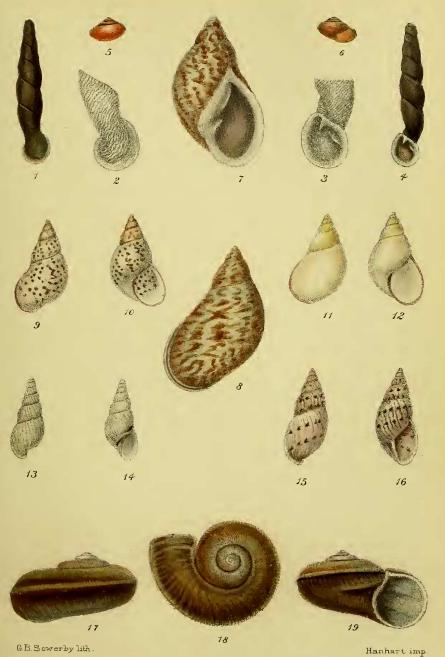
BULIMUS GUENTHERI, n. sp. (Plate XXIII. figs. 7, 8.)

Testa anguste perforata, ovata, solida, lævis, fusca, flammis albidis irregulariter angulatis et undulatis picta; spira conica, breviuscula, apice obtusiusculo; anfractus  $4\frac{1}{2}$ , convexi, ultimus  $\frac{2}{3}$  longitudinis æquans, inflatus, basi rotundatus; columella fere verticalis, plica obliqua crassiuscula munita; apertura ovalis, leviter obliqua, intus griseo-fusca; peristoma crassum, reflexum, marginibus callo crassiusculo junctis.

Long. 41, diam. maj. 26 millim.; apertura 12 lata, 22 longa.

Hab. U.S. of Colombia.

This species is remarkable for the smoothness of its surface, having neither granules nor striæ. In form it somewhat resembles B. cardinalis (Pfeiffer), while its markings are like those of a



NEW SHELLS FROM U.S.OF COLOMBIA .



variety of B. succinoides (Petit). The only specimen I have seen belongs to the National Collection at South Kensington.

BULIMULUS KOPPELI, n. sp. (Plate XXIII. figs. 9-12.)

Testa imperforata, ovato-conica, tenuis, nitens, carneo-albida vel luteo-straminea, plerumque maculis parvis nigro-fuscis promiscue conspersis picta, ad apicem carnea; spira acute conica; anfractus 6, convexiusculi, longitudinaliter lævissime irregulariter striati; sutura leviter impressa; anfractus ultimus subventricosus, ½ longitudinis fere æquans, basi rotundatus; apertura subovalis, leviter obliqua, latiuscula, intus albida, maculis anfractus ultimi transmeantibus; peristoma tenue, roseo marginatum; marginibus callo tenuissimo junctis.

Long. 25, diam. maj. 15 millim.

Hab. Bogota.

A pretty little shell, varying considerably in form and colour, but the lip appears to be always thin and prettily edged with red. Of the two specimens lent me for description by Mr. Da Costa, one is nearly white, profusely sprinkled with small brown spots, while the other is of a yellowish straw-colour (more decided yellow towards the apex), with only a few pale spots. I have as yet only seen very few specimens, but these exhibit considerable variations in their proportions. One apparently abnormally inflated specimen measures nearly 15 millimetres in width and only about 20 in ength; while the narrowest specimen measures scarcely more than 11 millimetres in width to 21 in height.

### Bulimulus da-costæ, n. sp. (Plate XXIII. figs. 15, 16.)

Testa anguste sed profunde umbilicata, elongata, nitida, irregulariter striatu, pallide fulvo-carnea, longitudinaliter fusco undulatim strigata, maculis parvis nigro-fuscis bifasciatim picta; spira convexo-conica, apice acuto; sutura leviter impressa; anfractus 6, convexiusculi, ultimus spiram subæquans, basi attenuatus; columella obliqua, reflexa; apertura subverticalis, intus rosea, maculis perlucentibus; peristoma simplex, leviter reflexum.

Long. 26, diam. maj. 11 millim. Hab. Bogota (Mus. Da Costa).

I have as yet only seen a single specimen of this species, which may be found to vary as much as the last. It seems, however, to be distinct from any hitherto known.

# BULIMULUS GLANDINIFORMIS, n. sp. (Plate XXIII. figs. 13, 14.)

Testa anguste perforata, oblonga, tenuissimu, nitida, pellucida, stramineo-albida, longitudinaliter ruguloso-striata; spira turrita, apice obtuso; anfractus 7, convexiusculi, sutura anguste canaliculata sejuncti; anfractus ultimus ½, longitudinis vix æquans, basi leviter attenuatus; apertura subovalis, fere verticalis; columellu rectiuscula, reflexa, perforationem fere tegente; peristoma simplex, acutum.

Long. 21, diam. maj. 7 millim. Hab. Bogota (Mus. Da Costa).

A transparent, fragile shell, with very much the appearance of a Glandina.

# HYALINIA GOMEZI<sup>1</sup>, n. sp. (Plate XXIII. figs. 5, 6.)

Testa perforata, depresso-rotundata, tenuis, pellucida, nitida, fusca, vix striatula; spira parum elevata, regularis, apice obtusiusculo; sutura appresso-marginata; anfractus 5, convexiusculi, ultimus non descendens, rotundatus, subtus convexus; apertura transverse lunato-ovalis; peristoma acutum, marginibus distantibus; columella subverticalis, dente minuto instructa.

Diam. maj. 11, min.  $9\frac{1}{2}$ , alt. 8 mi/lim.

Hab. Bogota (Mus. Da Costa).

A small hyaline shell, the only remarkable character of which is the presence of a minute tooth or tubercle on the columella. In this and other respects it bears a strong resemblance to some of the Polynesian species of *Microcystis*, though from its habitat it is probably rightly placed in the genus *Hyalinia*.

### CLAUSILIA MAGISTRA, n. sp. (Plate XXIII. figs. 1-4.)

Testa magna, anguste fusiformis, solidiuscula, sinistrorsa, nigrofusca; spira elongata; anfractus superstites 7, convexiusculi;
costulis obliquis irregulariter undulatis ornati, sutura impressa
sejuncti; anfractus ultimus leviter attenuatus, ad basin rotundatus, breviter solutus \frac{1}{3}, longitudinis subæquans; apertura
late auriformis, majuscula; peristoma continuum, expansum,
non reflexum; lamella superior arcuatim subverticalis, parviuscula, subcompressa; lamella inferior obliqua, latiuscula;
clausilium tenue, leviter arcuatum; plicis nullis; lunella nulla.

Long. 38, diam. maj. 7 millim. Hab. Bogota (Mus. Da Costa).

A fine large species, elegantly sculptured with irregularly undulating oblique costulæ. In form it closely resembles the smaller species, C. epistomium (Pfeiffer), which is found in the same locality. The internal structure presents the somewhat unusual character of being destitute of plicæ.

### Cyclotus filo-liratus, n. sp. (Plate XXIII. figs. 17-19.)

Testa late umbilicata, depressiuscula, olivacea, saturate olivaceofusco zonata, liris numerosis concentricis filiformibus instructa; spira levissime elevata; sutura profunda; anfractus 5, convexi,

¹ Since this paper was read Mr. Da Costa has called my attention to the proximity of this shell to a species named by Bland Proserpina swifti, from which it differs in being more convex and in having a much less pronounced tooth on the colu nella. There is no doubt that the two species belong to the same genus; but the animals being unknown it is impossible to speak with certainty as to their position. Judging from the shells, however, I think it very unlikely that they belong to the Proserpinidæ. The little Microcystis excrescens (Mousson), from Viti Levu (Feejee Islands), has a similar dentiform callus on the columella.—G. B. S.

ultimus non descendens, prope suturam concavo-depressus, ad peripheriam carinatus, aliter rotunde convexus; apertura subcircularis; peristoma continuum, simplex, leviter incrassatum.

Diam. maj. 36, min. 30, alt. 20 millim.

Hab. Bogota (Mus. Da Costa).

The thread-like ridges on the body-whorl of this shell are much more distant and prominent than in C. blanchetianus (Moricand) and in other allied species. I have at present only seen a single specimen.

#### EXPLANATION OF PLATE XXIII.

Figs. 1-4. Clausilia magistra, p. 298.

5, 6. Hyalinia gomezi, p. 298. 7, 8. Bulimus guentheri, p. 296.

9-12. Bulimulus koppeli, p. 297.

13, 14. — glandiniformis, p. 297. 15, 16. — da-costæ, p. 297.

17-19. Cyclotus filo-liratus, p. 298.

### May 3, 1892.

Prof. Flower, C.B., LL.D., F.R.S., President, in the Chair.

The Secretary read the following report on the additions to the

Society's Menagerie during the month of April 1892:—

The total number of registered additions to the Society's Menagerie during the month of April was 83, of which 31 were by presentation, 2 by exchange, 27 by purchase, 10 by birth, and 13 were received on deposit. The total number of departures during the same period, by death and removals, was 84.

Amongst the additions special attention may be called to:-

A Finely-marked Owl (Pseudoscops grammicus), from Jamaica, presented by the Jamaica Institute, April 8th, being the first living example of this Owl that has reached us.

Mr. Sclater exhibited and made remarks upon a nearly perfect egg of one of the extinct gigantic birds of Madagascar of the genus Epyornis (probably E. medius), obtained from the sands near Cape S. Marie in the South of Madagascar, by a correspondent, resident at Fort Dauphin, of Mr. W. Clayton Pickersgill, H.B.M. Vice-Consul at Antananarivo, and lately brought to England by that gentleman.

The egg measured 11½ by 8½ inches. Its larger circumference was  $31\frac{1}{2}$  inches, and its smaller  $26\frac{7}{8}$  inches. It was therefore not quite so large as the specimen figured by Rowley (Orn. Misc. iii. pl exit.), and came nearer in dimensions to the specimen in the British Museum (41,484) referred by Mr. Lydekker (Cat. Fossil

Birds, p. 214) to Æ. medius.

The following papers were read:-

# 1. Field-Notes on the Antelopes of Northern Somaliland. By H. G. C. SWAYNE, Capt. R.E., C.M.Z.S.<sup>1</sup>

[Received April 5, 1892.]

1. The Oryx (Oryx beisa).

Baet (pronounced Beyt).

The Oryx inhabits open stony ground, or barren hills, or open

grass plains.

It is very widely distributed over the Somali Country and not at all uncommon, and it may be found in all kinds of country except in the thick jungles with aloe undergrowth so much liked by the Lesser Kudu, and in the cedar forests on the higher ranges.

The Oryx feeds chiefly on grass, and is often found very far from water. It has keen sight, and protects itself more by this than by

its sense of hearing or smell.

Oryx are found in herds of moderate size, chiefly composed of cows. The herds number from half a dozen to thirty or forty.

The only Antelopes which go in very large herds in Northern

Somaliland are the Hartebeeste and Sæmmerring's Gazelle.

Numbers of bull Oryxes are found scattered singly all about the country, and possibly these make up in number for the preponderance of cows in the herds.

Single Oryxes are almost always bulls. Often two or three cows with growing calves will be found together, making up a small herd of half a dozen.

It is nearly impossible to distinguish which are the bulls in a herd, and they are so few in proportion to the cows that it is best not to fire at a herd at all. The bull is slightly higher in the withers than the cow, and the horns, though an inch or two shorter in the bull, are more massive, especially about the burr at the base, and they are more symmetrical. The cows' horns are often bent or of unequal length.

The Oryx is often revengeful when wounded and brought to bay. Twice I have seen a wounded Oryx make a determined charge into

a mob of Somalis armed with spears.

The Midgans, who are the outcast race, and are armed with bows and poisoned arrows, hunt the Oryx with packs of savage yellow pariah dogs; the thick skin round the withers of a bull Oryx is made by them into a white "gáshan" or shield 18 inches in diameter.

The hunting as carried out by the Midgans in the Bulhar Plain is as follows:—Three or four Midgans with about fifteen dogs go out just before dawn, and walk along silently through the scattered thorn-

<sup>&</sup>lt;sup>1</sup> [Capt. Swayne has now kindly sent me the promised field-notes on the Antelopes of Somaliland of which I have lately given an account to the Society, mainly based upon his valuable specimens (see P. Z. S. 1892, pp. 98, 117). The first set of all the specimens sent to me by Capt. Swayne has been presented in his name to the British Museum, and the duplicates to the U.S. National Museum at Washington. I have added; at Captain Swayne's request, the scientific names and some references to these Notes.—P. L. S.]

jungle till fresh tracks are found. These are followed till the game is sighted. By throwing stones towards the Oryxes, whistling, and other signs, which the dogs thoroughly understand, they are shown the game, and settle down to their work methodically. The dogs run mute, the men following at a crouching trot, which in a Somali is untiring, and this lasts for a mile or two, when the dogs run into their game and open in chorus round the herd of Oryxes as it stands at bay. The Oryxes make repeated charges at the dogs, which are often badly wounded. The dogs generally try to pull down a calf, avoiding the mother's sharp horns. Sometimes the whole herd will charge the dogs together to rescue a calf. The Midgans come crouching up amongst the bushes and let off a flight of poisoned arrows into the mass of Oryx. On seeing the men, the herd breaks up like a bursting shell. An animal wounded by one of these arrows takes a line of its own, and is carefully followed till found dead, or it is easily pulled down by the dogs in its weak state.

I have often joined the Bulhar Midgans in their trips. sleep out night after night under the trees, guarded by the halftamed dogs. Their camping arrangements are primitive. slightly roast the Oryx-meat in the fire and eat it nearly raw. one has no matches, one may have the pleasure of helping them light a fire by rubbing two sticks together. It takes twenty minutes; special wood has to be selected. It would take Europeans a very

long time to get a light.

The pariah dogs have no affection for their masters, and growl and snap when approached; but, curiously, when hunting they are

very obedient and obey every sign or call.

The skin on the withers of a bull Oryx is about \( \frac{3}{2} \) inch thick. The average length of horns in a good bull is 32 inches, in a cow 34 inches.

Young Oryxes when caught and confined in a cage will sometimes show their stubborn, wild nature by charging the bars, head down, and killing themselves. A case of this occurred in Berbera.

Oryxes are by no means fast Antelopes, and when wounded are

easily ridden down.

The young calves are very like those of English cattle, but smaller, with stumpy black horns a few inches long. They give out a peculiar half-bleat, half-bellow, when attacked by dogs or wounded.

Oryxes sometimes strike sideways with their horns as we use a stick. When angry an Oryx suddenly lowers his horns till they are nearly parallel with the ground, and makes a dash forward with surprising swiftness.

Lions are very fond of Orvx-meat. I have often seen Orvxes in company with Hartebeestes and Gazelles. Once I saw a small herd with some of the Flabby-nosed Gazelles, and amongst them were two Ostriches.

# 2. The Kudu (Strepsiceros kudu).

Gódir or Gorialeh-Gódir (male); Adér-yu (female); Adér-yu (collective name for herd-animals of both sexes and all ages).

Proc. Zool. Soc.—1892, No. XXI.

Kudus are found in mountainous or very broken ground where

there is plenty of bush and good grass and water.

Sometimes a solitary old bull Kudu will make his mid-day lair close to water, in some quiet part of the hills. They are very retiring, and live in small families, two bulls and seven cows being the largest number I have noticed together. They prefer the steepest mountains, but wander about at night in search of grass in broken ground in the neighbouring plains.

An old male with a heavy pair of horns avoids thick jungle, where they may catch in the branches, and likes to spend the heat of the day under the shadow of some great rock on the mountain-side, where he can get a good view around. His eyes, nose, and ears appear to be equally on the alert, and he is often very cunning.

Although such a heavy animal he is a good climber. He is hard to stalk, but, once successfully approached, the steep nature of the

ground generally yields him up an easy victim to the rifle.

The alarm-note of the female Kudu is a loud startling bark, which echoes far into the hills around, and is similar to that of the Indian Sambar hind. The bark is accompanied by an impatient pawing of the ground with the hoofs.

The habits of the Greater and Lesser Kudu of Somaliland exactly correspond respectively to those of the Indian Sambar and Spotted Deer. Great Kudus live in the mountains; Lesser Kudus live on

the bush-covered slopes at their base.

Kudus are generally timid, but care must be taken when coming suddenly on them, as I once saw an unwounded bull Kudu make a very determined charge from some thirty yards' distance at a solitary man, who had been sent to stop the mouth of a gorge. The man jumped to one side and threw his spear, grazing the beast's flank. The Kudu galloped out into the plain and escaped. I had a good view of this, and there could be no doubt as to the intention of the beast.

The Kudu is the largest of all the Somali Antelopes, a large bull standing about 13 hands 1 inch. A good pair of horns in Somaliland will measure nearly 3 feet from base to tip, and 48 inches round the spiral of each horn. The largest Somali Kudu head I have ever seen measured 56 inches round the spiral.

The Kudu is rare except in the highest mountains. It is found on the highest ground of Northern Somaliland, inhabiting the top of Wagar Mountain and Golis Range, which rise respectively to six

thousand eight hundred and six thousand feet.

Kudus have lately become very shy and scarce in these mountains. A Kudu head is a great prize, and a good pair of horns should be ample reward for a fortnight's climbing in the hills.

Kudus, although active climbers, are not fast on level ground.

# 3. The Lesser Kudu (Strepsiceros imberbis).

Gódir or Arreh-Gódir (male); Adér-yu (female); Adér-yu (collective).

This is quite the most beautiful of all the Somali Antelopes, and the skin is more brilliantly marked and the body more graceful than in the Great Kudu.

The Lesser Kudu is found in thick jungles of the larger kind of thorn tree, especially where there is an undergrowth of the "Hig" or pointed aloe, which is of a light green colour and grows four feet high. This Antelope may also be found hiding in dense thickets of tamarisk in the river-beds. It is never found in the open grass plains, and I have never seen one in the cedar-forests on the top of Golis.

The favourite haunt of the Lesser Kudu used to be along the foot of this range, but they are seldom seen there now. The Lesser Kudu likes to be near water if possible, and living, as it does, in thick bush, its ears are wonderfully well developed. It has strong hindquarters, and is a great jumper, the white bushy tail flashing

over the aloe clumps as it goes away in great bounds.

Lesser Kudus are very cunning and will stand quite still on the farther side of a thicket, listening to the advancing trackers; then a slight rustle is heard as they gallop away on the farther side.

The best way to get a specimen is to follow the new tracks of a buck, the shooter advancing parallel with the tracker, but some 50 yards to one flank and in advance; a snap shot may then be obtained as the Kudu bounds out of the farther side of the thicket, first giving the warning rustle. One may be months in the country before getting a really good specimen.

Lesser Kudus go in small herds of about the same number as the Great Kudus. Old bucks are nearly black, and the horns become

smooth by rubbing against trees.

The average length of a good buck Lesser Kudu's horns is about 25 inches from base to tip. The longest I have shot or seen was between 27 and 28 inches in a straight line. The horns are very sharp. I have never seen a Lesser Kudu charge anybody.

# 4. The Somali Hartebeeste (Bubalis swaynei)1.

Sig.

South of the highest ranges, and at a distance of about 100 miles from the coast, are open plains some four or five thousand feet above sea-level, alternating with broken ground covered with thorn-jungle, with an undergrowth of aloes growing sometimes to a height of six feet.

This elevated country, called the "Haud," is waterless for three months, from January to March; it was crossed by Mr. James's party in 1884, when their camels were thirteen days without water.

Much of the Haud is bush-covered wilderness or open semidesert, but some of the higher plains are, at the proper season, in early summer, covered, far as the eye can reach, with a beautiful carpet of green grass, like English pasture-land. At this time of the year pools of water may be found, as the rainfall is abundant.

This kind of open grass country is called the "Ban." Not a bush

<sup>1</sup> Sclater, above, p. 98, pl. v.

is to be seen, and some of these plains are thirty or forty miles each

way.

There is not always much game to be got in the Haud; but a year ago, coming on to ground which had not yet been visited by Europeans, I found one of these plains covered with herds of Hartebeestes, there being perhaps a dozen herds in sight at one time, each herd containing three or four hundred individuals.

Hundreds of bulls were scattered singly on the outskirts and in

spaces between the herds, grazing, fighting, or lying down.

The scene I describe was at a distance of over a hundred miles from Berbera; and the game has probably been driven far beyond that point by now.

The Hartebeeste bulls are very pugnacious, and two or three couples may be fighting round the same herd at one time. Often

one of the bulls will be sent rolling head over heels.

The easiest way to get a specimen is to send a couple of Midgans round above the wind to drive the Hartebeeste towards you, at the same time lying down in the grass. A shot may be got within fifty yards, but no one would care to shoot many Hartebeestes, as the trophy is poor.

Often Oryxes and Sæmmerring's Gazelles are seen in company with these great troops of Hartebeestes, but the Oryxes are much wilder. The Hartebeestes are rather tame, and they and the Sæmmerring's

Gazelles are always the last to move away.

Hartebeestes have great curiosity, and rush round a caravan, halting now and then within two hundred yards to gaze. This sight is an extraordinary one, all the Antelopes having heavy and powerful forequarters, head, and chest, of a different shade of chestnut to the hindquarters, which are poor and fall away. In the midday haze on the plains they look like troops of Lions.

The pace of the Hartebeeste is an ungraceful lumbering canter; but this is really the fleetest and most enduring of the Somali Antelopes. The largest herd I have ever seen must have contained a thousand individuals, packed closely together, and looking like a regiment of cavalry, the whole plain round being dotted with single

bulls.

The coat is glossy like that of a well-groomed horse.

From their living so much in the open grass plains the Hartebeeste must live entirely on grass, for there is nothing else to eat;

and it must be able to exist for several days without water.

Hartebeestes are the favourite food of Lions, and once, when out with my brother, I found a troop of three Lions sitting out on the open plains, ten miles from the nearest bush. They had evidently been out all night among the herds, and on their becoming gorged, the rising sun had found them disinclined to move.

Hartebeeste horns vary greatly in shape and size. There are the short massive horns and the long pointed ones, and all the gradations between. Some curve forward, with the points thrown back; others curve outwards in the same plane as the forehead, the points turning

onward.

### 5. Waller's Gazelle (Lithocranius walleri).

Gerenouk.

The Gerenouk is the commonest and most widely distributed of the Somali Antelopes except the little Salt's Antelope, which springs like a hare from every thicket.

The long neck of the Gerenouk, large giraffe-like eyes, and long mobile muzzle are peculiar, the only other Antelope at all like it

being the Dibatag (Ammodorcas clarkei).

The Gerenouk is more of a browser of bushes than a grass-feeder, and I have twice shot them in the act of standing on the hind legs, neck extended, and fore feet against the trunk of a tree, reaching down the tender shoots, which could not be got in any other way. Thus not only the appearance, but the habits of a Gerenouk are giraffe-like.

The skull goes far back behind the ears like that of a camel.

The Gerenouk is found all over the Somali Country in small families, never in large herds, and generally in scattered bush, ravines, and rocky ground.

I have never seen the Gerenouk in the cedar forests which crown

Golis, nor in the treeless plains which occur in the Haud.

Gerenouk are not necessarily found near water, in fact generally

in stony ground with a sprinkling of thorn-jungle.

The gait of this Antelope is peculiar. When first seen, a buck Gerenouk will generally be standing motionless, head well up, looking at the intruder and trusting to its invisibility. Then the head dives under the busbes, and the animal goes off at a long crouching trot, stopping now and again behind some bush to gaze.

The trot is awkward-looking and very like the trot of a camel.

The Gerenouk seldom gallops, and its pace is never very fast.

In the whole shape of the head and neck and in the slender lower jaw there is a marked resemblance between the Gerenouk and the newly-discovered Dibatag. The texture of the coat is much alike in both. The horns of young buck Gerenouk are almost exactly the same shape as those of the Dibatag.

The average length of a Gerenouk's horns is about 13 inches. I

have never seen a female with horns.

Female Gerenouks sometimes lose or desert their young ones, as I have now and then come on quite young Gerenouk living alone in the jungle.

# 6. SEMMERRING'S GAZELLE (Gazella sæmmerringi).

Aoul.

Five years ago, when staying in quarters at Bulhar, I remember that the Aoul could be seen from the bungalow, grazing out on the plain. The Bulhar Maritime Plain used to be full of them, but they have been so persecuted by sportsmen that they have retired to a great distance, and are seldom shot near Bulhar now.

The Aoul weighs about the same as the Gerenouk, but has a shorter neck and a clumsy-looking head. It is altogether a coarse

animal. It is a grass-feeder, and lives in the open plains or in scattered bush, but never in thick jungle, and it prefers flat ground.

The white hindquarters can be seen from a great distance, making a herd of Aoul look like a flock of sheep in the haze of the plains.

I have never seen Aoul on the Golis Rauge, but in the Hartebeeste ground beyond they are common, and may often be seen in large

herds along with the herds of Hartebeestes.

The Aoul are the most stupid and easy to shoot of all the Somali Antelopes, and their habits are identical with those of the Indian Blackbuck; but the Aoul is not to be compared with the Blackbuck for beauty or grace of movement.

Aoul often make long jumps when going away, and are apparently a near relative of the Cape Springbuck. I have never seen them spring vertically to anything like the height to which the Indian Blackbuck will spring. Presumably it is done to get a better view

of the plain.

Aoul are inquisitive and will follow a caravan. If fired at they make off across the front at racing speed, drawing up in a troop now

and then to gaze.

If much meat is required, it is easy in scattered bush to run into a large herd and shoot several. A large herd becomes confused, as the leaders cannot be seen in bush.

The bucks with a herd will often be seen fighting or chasing each other about at speed as Blackbuck do. Solitary bucks are sometimes found far from any herd.

Aoul can live a long way from water. Near the coast they often

come down close to the shore, possibly to obtain salt.

A wounded Aoul buck does not hide, but will lie down in the most open spot he can find, and will generally have a circle of jackals waiting round him. Aoul can easily be shot at dusk, when they are apt to blunder close to a caravan.

The horns vary in shape, generally being lyrated, sometimes pointing forward like the Gerenouk horns. They are often malformed, and seldom have much symmetry. The largest pair I have seen measured 17 inches; the average is about 14 inches, following the curve.

I once saw a herd of about fifteen young fawns of this Antelope gathered together a mile away from the rest of the herd.

### 7 & 8. The Gazelles.

THE COAST GAZELLE (Gazella pelzelni). THE BIG-NOSED GAZELLE (G. spekii). Both Déro.

The ordinary Coast Gazelle almost exactly resembles the Arabian and the Indian Gazelle (G. bennetti). The other, the Big- or Flabby-nosed Gazelle, inhabits the elevated country, commencing about 35 miles from the coast.

I have shot numbers of Gazelles for food at various times, and have always noticed that the Flabby-nosed Gazelle has a much thicker and longer coat than the Coast Gazelle. This is evidently